

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises ~~a galactose-containing sugar~~ lactose and an additional sugar, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of ~~to obtain~~ cotyledonary stage embryos suitable for germination.

2-4. (Cancelled)

5. (Currently amended) The method of claim 1, wherein ~~lactose~~ the galactose-containing sugar is less than about 6.0 % of the nutrient medium.

6. (Previously presented) The method of claim 1, wherein the nutrient medium is gelled or liquid.

7. (Previously presented) The method of claim 1, wherein the coniferous somatic embryos are selected from the family *Pinaceae*.

8. (Currently amended) The method of claim 7, wherein the coniferous somatic embryos are selected from the genera *Pinus*~~f.~~f. and *Picea* and *Pseudotsuga*.
9. (Previously presented) The method of claim 8, wherein the coniferous somatic embryo is *Pinus taeda* or a hybrid thereof.
10. (Previously presented) The method of claim 8, wherein the coniferous somatic embryo is *Pseudotsuga menziesii*.
- 11-12. (Cancelled)
13. (Currently amended) The method of claim 1 ~~12~~, wherein the prematuration medium contains less auxin and less cytokinin than the maintenance medium.
14. (Currently amended) The method of claim 1 ~~12~~, wherein the prematuration medium further comprises abscisic acid.
15. (Cancelled).
16. (Previously presented) The method of claim 1, wherein the additional sugars are readily metabolized.

17. (Original) The method of claim 16, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.
18. (Currently amended) The method of claim 1, wherein lactose ~~the galactose-containing~~ sugar is more than ~~about~~ 1.0% of the nutrient medium.
19. (Previously presented) The method of claim 1, wherein the embryogenic culture contains early stage embryos.
20. (Currently amended) The method of claim 1, wherein lactose ~~the galactose-containing~~ sugar is less than ~~about~~ 2.0% of the nutrient medium.
21. (Currently amended) The method of claim 1, wherein lactose ~~the galactose-containing~~ sugar is between ~~about~~ 1.0% and ~~about~~ 6.0% of the nutrient medium.
22. (Previously presented) The method of claim 1, wherein the nutrient medium further comprises an auxin and a cytokinin.
23. (Currently amended) A method for reproducing *Pinus taeda*, ~~*Pinus radiata*~~, and *Pseudotsuga menziesii* ~~or a hybrid thereof~~ somatic embryos by somatic embryogenesis which comprises growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and

prematuration medium, wherein the nutrient medium comprises lactose ~~a galactose-containing sugar~~ and an additional sugar, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of ~~to obtain~~ cotyledonary stage embryos suitable for germination.

24-26. (Cancelled).

27. (Currently amended) The method of claim 23, wherein lactose ~~the galactose-containing compound~~ is less than ~~about~~ 6.0% of the nutrient medium.

28. (Previously presented) The method of claim 23, wherein the nutrient medium is gelled or liquid.

29-32. (Cancelled)

33. (Currently amended) The method of claim 23 ~~32~~, wherein the prematuration medium contains less auxin and less cytokinin than the maintenance medium.

34. (Currently amended) The method of claim 23 ~~32~~, wherein the prematuration medium further comprises abscisic acid.

35. (Cancelled).

36. (Previously presented) The method of claim 23, wherein the additional sugars are readily metabolized.

37. (Original) The method of claim 36, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

38. (Currently amended) The method of claim 23, wherein lactose ~~the galactose-containing sugar~~ is more than ~~about~~ 1.0% of the nutrient medium.

39. (Previously presented) The method of claim 23, wherein the embryogenic culture contains early stage embryos and the early stage embryos are being cultured in the selected nutrient medium.

40. (Previously presented) The method of claim 23, wherein the nutrient medium further comprises an auxin and a cytokinin.

41. (Currently amended) The method of claim 23, wherein lactose ~~the galactose-containing sugar~~ is less than ~~about~~ 2.0% of the nutrient medium.

42. (Currently amended) The method of claim 23, wherein ~~lactose~~ ~~the galactose-containing~~ sugar is between ~~about~~ 1.0% and ~~about~~ 6.0% of the nutrient medium.

43. (Currently amended) A method for reproducing conifers by somatic embryogenesis which comprises: growing conifer cells on a nutrient medium comprising ~~lactose~~ ~~a galactose-containing sugar,~~ an additional sugar[s], an auxin, and a cytokinin to produce an embryogenic culture and transferring the embryogenic culture to maturation medium to obtain cotyledonary stage embryos suitable for germination and reproduction of conifers.

44-49. (Cancelled)

50. (New) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises lactose, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination.

51. (New) The method of claim 50, wherein the somatic embryo is *Pinus taeda* or a hybrid thereof.

52. (New) The method of claim 50, wherein the lactose comprises 1% or more of the nutrient medium.

53. (New) The method of claim 50, wherein the lactose is between 1% and 6% of the nutrient medium.

54. (New) The method of claim 50, wherein the lactose is less than 6% of the nutrient medium.

55. (New) A method for reproducing somatic embryos by somatic embryogenesis comprising growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of maintenance medium and prematuration medium; wherein the nutrient medium comprises a galactose-containing sugar and an additional sugar; wherein the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination; and wherein the coniferous somatic embryo is selected from the group consisting of *Pinus radiata* or hybrids thereof and *Pseudotsuga menziesii* or hybrids thereof.

56. (New) The method of claim 55, wherein the coniferous somatic embryo is *Pinus radiata* or a hybrid thereof.

57. (New) The method of claim 55, wherein the coniferous somatic embryo is *Pseudotsuga menziesii* or a hybrid thereof.
58. (New) The method of claim 55, wherein the galactose-containing sugar comprises 1% or more of the nutrient medium.
59. (New) The method of claim 55, wherein the galactose-containing sugar is between 1% and 6% of the nutrient medium.
60. (New) The method of claim 55, wherein the galactose-containing sugar is less than 6% of the nutrient medium.